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Ecstasy: America's New "Reefer Madness"†

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Abstract—MDMA (3,4-methylenedioxymethamphetamine) was first used as a legal adjunct to psychotherapy in the 1970s. By the early 1980s, "Ecstasy" had become a tiny part of the recreational American drug scene, and was ultimately criminalized in 1986. For a decade use continued, but remained quiet. By the end of the 1990s, increased supply, demand, seizures of pills, arrests of distributors associated with organized crime, adverse reactions, and government reports of problematic brain changes created an Ecstasy media frenzy. The government's reaction led to a public education campaign and proposals for exponential penalties for production, distribution and use of MDMA. This article looks at the history, epidemiology, and politics of Ecstasy, the media's response, and the ways in which media and government reaction will compromise harm reduction and safety.

Keywords—Ecstasy, harm reduction, politics, MDMA, teenagers

When I launched the first federally funded sociological study of MDMA in the United States in 1987, hardly anyone had ever heard of Ecstasy. Its use had been limited to avant-guard psychotherapists and their New Age clients, Deadheads, gays, a handful of college students, and a few yuppies in Texas. Ecstasy use was so tiny it didn't even make the government's annual surveys of drug use.

Now, just fifteen years later, Ecstasy has become the drug scare du jour, with annual surveys documenting steadily increasing use. Twelve percent of high school seniors have admitted to trying it, and the Partnership for a Drug Free America, who brought us those "this is your brain on drugs" commercials, has produced a brand new anti-Ecstasy campaign. Meanwhile, increasingly draconian penalties for use and distribution are being devised by eager politicians, making MDMA seem like America's new "reefer madness."

What a short, strange trip it's been.

ECSTASY THEN

I first heard of MDMA when my weekly issue of *Time* magazine arrived in June of 1985. The cover story featured a "new" drug with a very interesting name. At the time, I was a research sociologist with funding from the National Institute on Drug Abuse. I thought I knew the drug scene in America. Ecstasy was a complete surprise.

I learned that MDMA was not a new drug at all, and in fact was patented in 1914 as an intermediary for more advanced therapeutic drugs. Some accounts say MDMA was revived in the 1950s during the Cold War. As the story goes, the Army was testing compounds for brainwashing potential. MDMA was tried and rejected for such military weaponry.

MDMA was rediscovered in the early 1970s by chemist Alexander Shulgin, and by 1976, a small group of psychiatrists and psychologists began to use it in their practices as a therapeutic agent. Calling it an "entactogen" (to touch within), they found it reduced fear and promoted acceptance, thereby facilitating communication. Deemed a "penicillin for the soul," MDMA (also called "Adam") enabled couples in troubled marriages to talk to one another; it allowed rape and incest victims to come to terms with their trauma; and it helped chronically ill patients to face pain and death.

The Controlled Substances Act of 1970 had already prohibited human research on psychedelic drugs. The therapeutic community was fearful of publicizing their positive, if anecdotal, research findings, which would spread the word that MDMA was an extraordinary tool for communication and spiritual growth. These insightful

psychotherapists were rightly concerned that popularization would lead inevitably to criminalization.

Proselytizing distributors, on the other hand, believed that MDMA could heal the world. Dismissing psychotherapists' fears, they looked for a name that would sell the "medicine." Bruce Eisner (1989), in his book, *Ecstasy: The MDMA Story*, claims that these entrepreneurs believed "Empathy" would have best described the drug, but they chose "Ecstasy," which would surely sell better.

And sell it did, crossing over from alternative types to otherwise conventional yuppies in Texas. By 1983, Sunday school teachers and real estate salesmen were using Mastercards to buy Ecstasy from bartenders in Dallas and Austin, who paid taxes on their sales.

The blatant use of Ecstasy in Texas caught the attention of the Drug Enforcement Administration. Preliminary research on rats (given megadoses of MDA, a chemical cousin to MDMA) enabled the agency to begin the process of criminalizing Ecstasy by placing it in the government's most restrictive category, Schedule I.

During the perfunctory hearings to determine MDMA's status, a committed group of psychiatrists argued that the drug had medical value. The DEA's own administrative judge was convinced a placement in Schedule III was appropriate, enabling MDMA to be used in therapeutic settings. Judge Francis Young believed MDMA had low potential for abuse, accepted medical value and accepted medical safety.

Nonetheless, the DEA overturned its own judge's ruling, and placed MDMA in Schedule I, declaring it had no medical use and high abuse potential, effectively criminalizing its use permanently on July 1, 1986 (Rosenbaum & Doblin 1991).

Prohibition failed to eliminate the use of Ecstasy. Publicity from the hearings simply brought the largely unknown drug to the attention of recreational drug users, and its price dropped from \$25 to \$8 per dose. Only therapists were deterred, and most stopped using MDMA in their professional practices.

Shortly after criminalization, in 1987, our NIDA-funded research study began. Interviews with 100 adults averaging 35 years of age revealed that regardless of the user's background and whether they were therapeutically or recreationally oriented, descriptions of the benefits of Ecstasy were consistent. The feeling on MDMA was described as complete acceptance of and by others. Users talked of diminished fear and an increased ability to communicate. We heard much about expressions of tolerance and love as defenses melted away. Most striking, study participants told us they derived these positive feelings from precious few other parts of their lives (Beck & Rosenbaum 1994).

If mature adults found MDMA use so fulfilling, I could only imagine how alluring it would be for teenagers during their adolescent struggles. Although teenagers hadn't been part of the Ecstasy scene back then, it was only a matter of time and availability.

ECSTASY NOW

Indeed, everything changed by the end of the 1990s. The generation of teenagers who had come through Drug Abuse Resistance Education and other programs designed to prevent drug use had become increasingly cynical about "just say no." The rave phenomenon had made its way from Europe to the U.S. and was providing millions with a sense of community they badly needed. And for the first time, young people had no difficulty finding MDMA.

The years between 1998 and 2000 saw dramatic increases in Ecstasy use, availability, and problems. According to the Monitoring the Future data, in 1998, 5.8% of high school seniors had tried MDMA; by 1999 that figure had increased to 8%, and to 11% by 2000—roughly doubling in three years (Johnston, O'Malley & Bachman 2001; see Table 1).

U.S. Customs and the DEA reported seizures of 750,000 pills in 1998, 3.5 million doses in 1999, and 9.3 million hits in 2000, representing a 12-fold increase (U.S. Customs Service 2000; see Table 2). The arrests of such high profile organized crime characters such as Sammy "the Bull" Gravano for sales of MDMA indicated that organized crime had entered the world of Ecstasy distribution.

Only a fraction of the MDMA coming into the United States was seized, so it was clear that Ecstasy had become widely available. Indeed, when asked if they could purchase Ecstasy, the percentage of high school seniors saying it would be "fairly" or "very" easy increased from 38% in 1998 to 40% in 1999 to 51% in 2000 (Johnston, O'Malley & Bachman 2001; see Table 3).

With increased use of Ecstasy came reports of adverse reactions to the drug, even fatalities. Emergency-room visits increased, and several young people died from taking adulterated substances (known as "fake Ecstasy") containing poisonous substitute chemicals or from consuming huge amounts of water. The Drug Abuse Warning Network (DAWN), which collects data each year on drugs that people report having taken before coming to the emergency room, calculated that individuals mentioning Ecstasy increased 295% between 1998 and 2000, from 1,143 to 4,511 (SAMHSA 2001; see Table 4).

Although there have been too many problems associated with Ecstasy use, it is crucially important to put these reports in context. In 2000, there were 1,100,539 drug-related “mentions” in emergency departments in the U.S. Ecstasy constituted less than half of 1% of total drug-related mentions. At least 80% were for patients under 25 years old, usually involving use of multiple substances (e.g.: alcohol, ketamine, marijuana, cocaine, and GHB).

Finally, at the end of 1999, George Ricaurte and his team publicized their neurotoxicity research, which compared brain scans of 14 Ecstasy users with those of nonusers. They found nerve damage that persisted for seven years, suggesting the possibility of long-term alteration (McCann et al. 1998). Although Ricaurte’s research was preliminary, and provoked more questions than answers, it effectively set in motion the current “this is your brain” campaign (for a comprehensive discussion of neurotoxicity research, see Grob 2000; and a recent critique, see Ainsworth 2002).

Panic Spreads

In December of 1999, “raver madness” began in earnest. Armed with increases in use, availability, and reported problems, the National Institute on Drug Abuse (NIDA) launched a campaign to alert Americans to the dangers of Ecstasy. NIDA’s “Club Drugs Initiative” allocated \$54 million for research and solutions, prevention education through their website, the dissemination of postcards showing a normal brain next to a brain “on Ecstasy,” and community alert bulletins.

The media produced no less than 1000 print and electronic stories on this topic in 2000, the vast majority alarmist. Meanwhile federal, state and local officials began devising tougher and tougher penalties to stem the tide of America’s newest “epidemic.”

The media sounds the alarm. The print and electronic media picked up the Ecstasy story in December of 1999 and ran with it. Fear-inducing print headlines included:

- “Raves about ‘Club Drugs’ Cause Worry” (*USA Today*, December 7, 1999)
- “The Danger of Being Young, Hip, and High” (*U.S. News and World Report*, Dec. 13, 1999)
- “Party-Drug scene: ‘E’ Trade Spreads Largely Unchecked” (*Christian Science Monitor*, May 1, 2000)
- “Too High a Price” (The Reporter.com, May 23, 2000)
- “The Poisoning of Suburbia” (Salon.com Health, July 6, 2000)
- “Alarm on Spreading Ecstasy” (*Washington Post*, August 1, 2000)
- “In New Drug Battle, Use of Ecstasy Among Young Soars” (*New York Times*, Aug. 2, 2000)
- “Agony of Ecstasy: Providers Brace for Treatment Challenge” (*Alcoholism and Drug Abuse Weekly*, August 14, 2000)
- “Ecstatic About Ecstasy—But at What Cost?” (*The Journal of Addiction and Mental Health*, Sept.-Oct. 2000).

The television magazine show *60 Minutes II* aired “Ecstasy: Dangers of the Designer Drug and Who is Using It”, and host Vickie Maybrey told its viewers, “Ecstasy is no different from crack, heroin,” calling it “the most dangerous drug in America” (Maybrey 2000).

Dateline NBC described raves as “huge gatherings of teenagers to twenty-somethings with music and dancing and dangerous drugs that are sold and consumed like soda” (Larson 2000).

During this period there were a handful of in-depth, more balanced stories. The *New York Times* printed, “Distilling the Truth in the Ecstasy Buzz” (Feuer 2000), and even Geraldo Rivera attempted to temper alarmist stories with “Best Way to Educate Young People About Ecstasy and Other Drugs” (Rivera 2000). A *Time* magazine story attempted to provide a more comprehensive look at Ecstasy, noting the context of use rather than the drug itself as problematic (Cloud 2000). Still, a result of the deluge of disturbing stories was Ecstasy’s emergence from relative obscurity to household word, and from a pleasure to a plague.

The government responds. By the Spring of 2000, a number of governmental agencies had jumped into the Ecstasy frenzy. In May, Senator Bob Graham of Florida and Charles Grassly of Iowa introduced the Ecstasy Anti-Proliferation Bill, which would increase penalties exponentially for distribution as well as possession.

The Drug Enforcement Administration held a conference, “Ecstasy and Club Drugs: Dancing with Darkness,” in July of 2000. The Chief of Operations, Richard Fianno, set the tone for the conference with his opening remarks: “Every city in the U.S. has experienced some rise in Ecstasy use over the last several years . . . The kids believe that Ecstasy is safe, they enjoy the rave experience, but actually what is happening is that over the next couple of days after taking Ecstasy their brain cells are actually being programmed to die” (Center for Cognitive Liberty and Ethics 2000).

Dr. David Gauvin, a DEA pharmacologist, warned: “Lately raves are just a venue for drug purchases. They are no more than analogous to a crack house in which you go, buy the drug, and go out the back door” (Center for Cognitive Liberty and Ethics 2000).

U.S. Customs trained 13 dogs to sniff for Ecstasy and formed an Ecstasy Task Force, and Psychomedics, a drug testing company, devised a hair test for job applicants. And in August of 2000, the Office of National Drug Control Policy kicked off a \$5 million media campaign to warn young people about the dangers of taking Ecstasy.

By 2001, a number of new anti-Ecstasy laws had been proposed. On the federal level, Senator Bob Graham (D-FL) introduced SB 1208, the Ecstasy Prevention Act of 2001. Although touted as a bill that would add significant monies to research, the bulk of the \$245 million bill was allocated to law enforcement, with just \$1.5 million for badly-needed research.

The U.S. Sentencing Commission proposed huge increases in mandatory minimum sentences in 2001 (see Table 5): from just over one year to five years of incarceration for possession of 200 grams of MDMA (about 800 pills); and from three years to 10 years for 2,000 grams. To draw the same sentence for cocaine, one would have to possess two and a half times that amount!

Several states have proposed and implemented new laws. Perhaps most draconian is the Illinois Ecstasy Law 2001, signed by Governor George Ryan. An individual caught in possession of 15 doses of MDMA will serve a mandatory sentence of four years in state prison.

In cities across the country, including New Orleans, Panama City Beach, Florida, Charlotte, North Carolina, and Nashua, New Hampshire, “anti-rave” ordinances were proposed in an effort to crack down on Ecstasy (and other club drugs). Numerous proposals were floated, including the prohibition of so-called Ecstasy paraphernalia such as glow sticks, Vaporub, masks, massage, and chill rooms.

In the summer of 2001, the National Institute on Drug Abuse hosted an international conference featuring presentations on the latest research breakthroughs about Ecstasy’s physiological and psychological effects. I attended that conference, hoping to get answers to troubling questions about the long and short term effects of Ecstasy. The bulk of evidence presented at the conference produced far more questions than answers. The single most consistent message coming out of the research was that much more research was needed to determine what this drug really does, for how long, and what that means in functional terms for those who use it.

It is clear that more research about Ecstasy’s long-term effects on the brain is needed, but evidence presented at the conference also revealed that scientists know a great deal about MDMA’s immediate effects.

Kicking off the conference, a handful of epidemiologists acknowledged the causes of acute problems. Researchers talked about the negative consequences of overheating, dehydration, combining drugs, and “fake” Ecstasy, and advocated a realistic harm reduction media campaign (Vastag 2001).

While experts know a lot about reducing the negative effects of Ecstasy, because they face ostracism and loss of research funding, NIDA’s scientists hesitated to make explicit safety-oriented recommendations. Harm reduction messages were also absent from NIDA’s report on its conference (Mathias & Zickler 2001). Instead, political interests that mandate abstinence determine which “findings” are to be disseminated. It’s “just say no” or nothing at all.

The latest chapter in the Ecstasy saga involves a new series of ads. Following polling showing further increases in Ecstasy use, the Partnership for a Drug Free America has just launched a frightening ad campaign featuring a grieving father whose daughter died after ingesting MDMA (Leinwand 2002).

Cooler Heads Prevail—For a While

While the government focused exclusively on curbing use through publicizing problems and ratcheting up penalties, advocates of therapeutic use pushed for research and the courts upheld civil liberties.

In the fall of 2001, the Food and Drug Administration (FDA) approved the first study of MDMA’s efficacy in the treatment of posttraumatic stress disorder. With this nod to its potential for therapeutic use, Ecstasy has effectively gone back to its roots.

The government lost its case against the New Orleans rave promoters on February 4, 2002, when Judge G. Thomas Porteous ruled that “the government cannot ban inherently legal objects . . . because a few people use the same legal items to enhance the effects of an illegal substance.” In a victory for civil liberties, he continued, “when the First Amendment right of Free Speech is violated by the government in the name of the War on Drugs, and when that First Amendment violation is arguably not even helping in the War on Drugs, it is the duty of the Courts to enjoin the government from violating the rights of innocent people” (American Civil Liberties 2002).

In California, both houses rejected bills that would have increased penalties not only for sales, but for being “under the influence.”

Scare Tactics Won’t Work

In the coming months, the American public will be hit with frightening ads linking Ecstasy with brain damage and death. While research about possible brain changes is crucial, and each and every death even remotely associated with Ecstasy is unacceptable, these tactics are not the most pragmatic way to approach MDMA.

Beginning with the “fried egg” commercials (“this is your brain on drugs”), American youth have been bombarded with antidrug public service announcements (PSAs) since they were small children. The effectiveness of such messages is problematic at best, and may well be counterproductive (Fishbein et al. 2002). Understanding that adults have an abstinence-only agenda, young people often write off such messages, knowing adults will say just about anything to get them to abstain. The effect is to create a huge credibility hole; in the end, hysterical warnings only make for joke fodder, and may even result in increased drug use among teens.

This new anti-Ecstasy campaign is actually nothing new. For the past two years, the government has disseminated warnings about MDMA through their websites and on flashy postcards. Still, year after year Ecstasy use rises. When I ask teenage users why they have not heeded government warnings of possible brain damage, these veterans of “just say no” express deep cynicism. “Oh yeah,” said one 18-year-old regarding problematic brain changes attributed to Ecstasy, “they told us about that with marijuana too. But none of us believes we have holes in our brains, so we just laugh at those messages” (Rosenbaum 2001).

For over two decades adults have been telling young people to “just say no.” For a variety of reasons, including living in an anything-but-drug-free America and being risk-prone youth, despite admonishments to abstain, many young people say “sometimes” or “maybe” or “yes” (Rosenbaum 2002; Volberding 2000). A fallback strategy is needed that holds safety as its number one priority. An effective Ecstasy campaign should be designed to save lives and reduce health problems, rather than merely preaching total abstinence, which might not be the choice of all individuals.

THE NEED FOR HARM REDUCTION

There are inherent risks associated with the ingestion of all drugs: alcohol, pharmaceuticals, over-the-counter medications and “street” drugs including Ecstasy. Still, Americans continue to medicate and imbibe, as they have for centuries. Although an estimated 7,600 people die from taking aspirin or aspirin-like substances (nonsteroidal anti-inflammatory drugs, or NSAIDs) each year (Tamblyn et al. 1997), we all make calculated risk assessments, knowing the odds that we will simply cure our headache (and not die) are excellent. And so it is with Ecstasy.

Immediate negative reactions to MDMA have been due primarily to “fake” Ecstasy and context of use. Estimates by pill-testing organizations such as Dancesafe (for a discussion of harm reduction in the dance community, see the interview with founder Emanuel Sferios in Holland 2001) indicate that as much as 40% of “Ecstasy” pills have not been MDMA, but substances such as PMA (paramethoxyamphetamine) and DXM (dextromethorphan—the active ingredient in Robitussin cough syrup).

It is impossible for ordinary consumers to know what is contained in any illegal substance, because (unlike alcohol and pharmaceuticals) they are not regulated, controlled and labeled. Furthermore, those who want to turn a healthy profit have every reason to sell cheaper “look-alikes.” There is simply no quality control on the illegal market. If users continue to use what they think is MDMA, pill testing is imperative.

Most acute problems associated with Ecstasy have been a result of the context of use, specifically dancing too hard and for too long in a hot, sweaty environment, causing dehydration and heatstroke. Users should monitor their body temperature—take breaks, cool off, and drink water or a Gatorade-type drink. Users should be careful not to overhydrate (itself a problem).

Also, a “macho ingestion syndrome,” in which users take a combination of substances, sometimes at high dosages, has been responsible for adverse effects. These sorts of problems were virtually nonexistent in the early days of MDMA use. Today’s increased reports of depression and other neurological problems may be due simply to taking too much, too often.

Clearly, with MDMA, context is key, “less is more,” and moderation in frequency and dose level is crucial (for a more comprehensive discussion of the risks and benefits of MDMA and how to minimize problems, see Holland 2001:68-145).

To conclude, the public’s approach to Ecstasy ought to be informed by its (albeit) short history. MDMA has never been considered a completely safe drug. Early “flight guides” stressed the seriousness of the experience; the need to replenish fluids; the importance of taking vitamins that would be depleted; the dangers of taking more than one dose, and of combining MDMA with alcohol. Ecstasy was considered a “commitment” drug (unlike drinking a beer, for example) that should not be taken lightly. There was much concern, even then, about possible changes in brain chemistry, and advice to be very moderate with MDMA use.

These early harm reduction messages were extremely valuable to early users, whose use (for the most part) was infrequent and very often temporary. Perhaps those delivering information today could benefit from lessons learned when Ecstasy use was in its infancy and problems were rarely seen.

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TABLE 1
Use of MDMA*

Year	High School Seniors Who Have Tried Ecstasy
1998	5.8%
1999	8%
2000	11%

*Source: Johnston, O'Malley & Bachman 2001

TABLE 2
Government seizures of MDMA*

Year	Ecstasy Seizures (Tablets)
1998	750,000
1999	3.5 million
2000	9.3 million

*Source: U.S. Customs Service. 2000

TABLE 3
Availability*

Year	High School Seniors Who Say Ecstasy is "Fairly" or "Very" Easy to Purchase
1998	38%
1999	40%
2000	51%

*Source: Johnston, O'Malley & Bachman 2001

TABLE 4
Ecstasy Mentions in U.S. Emergency Departments*

Year	Number of ED Mentions and Episodes for MDMA
1994	253
1995	421
1996	319
1997	637
1998	1,143
1999	2,850
2000	4,511

*Source: SAMHSA 2001.

TABLE 5
New Ecstasy Sentencing Guidelines*

	Before May 1, 2001	After May 1, 2001
800 pills or 200 grams	15 months	5 years
8,000 pills or 2,000 grams	3 years	10 years

*Source: U.S. Sentencing Commission 2001.